



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/521,816

01/21/2005

Don Holmevik

85144-102/RWD

3750

7590

09/21/2006

Ryan W Dupuls
Ade & Company
1700 360 Main Street
Winnipeg Manitoba, R3C 3Z3
CANADA

EXAMINER

NGUYEN, NINH H

ART UNIT

PAPER NUMBER

3745

DATE MAILED: 09/21/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/521,816

Applicant(s)

HOLMEVIK ET AL.

Examiner

Ninh H. Nguyen

Art Unit

3745

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7,9 and 11-13 is/are rejected.
- 7) ☒ Claim(s) 8,10 and 14-19 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 January 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 01/21/05.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 2, 4, 6, 9, and 11-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Lang (4,471,613).

Lang discloses an engine device (Figs. 1-9) comprising: a wheel 28 supported for rotation in a working direction about a generally horizontal wheel axis (Fig. 1), defining a rising side and a falling side of the wheel as the wheel rotates; a plurality of pockets 7 at spaced positions about a periphery of the wheel; a tank 16 surrounding the wheel for containing a fluid about the wheel; means to introduce gas into the pockets on the rising side of the wheel (Fig. 1); means to remove gas from the pockets on the falling side of the wheel (col. 2, lines 34-37); and a power take-off shaft 22 coupled to the wheel for rotation with the wheel about the wheel axis;

wherein the pockets are spaced radially outward from the shaft (Fig. 3);

wherein the pockets are collapsible (Fig. 3);

wherein the shaft is arranged to extend through a wall of the tank (Fig. 1) and wherein there is provided a sealing member 23 connected between the wall and the shaft;

wherein the means to introduce gas into the pockets comprises a source of gas under pressure which selectively communicates with each of the pockets (due to pump 31, Fig. 1);

Art Unit: 3745

wherein the wheel includes a plurality of radially extending tubes 5 communicating between the pockets and the source of gas under pressure at the center of the wheel; and wherein the source of gas under pressure communicates through a shaft 1 of the wheel (Fig. 1).

3. Claims 1-5, 6, 9, and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Hogg (1,091,575).

Hogg discloses an engine device (Figs. 1-3) comprising: a wheel 8 supported for rotation in a working direction about a generally horizontal wheel axis (Fig. 1), defining a rising side and a falling side of the wheel as the wheel rotates; a plurality of pockets 18 at spaced positions about a periphery of the wheel; a tank 1 surrounding the wheel for containing a fluid about the wheel; means to introduce gas into the pockets on the rising side of the wheel (Figs. 2, 3); means to remove gas from the pockets on the falling side of the wheel (Figs. 2, 3); and a power take-off shaft 5 coupled to the wheel for rotation with the wheel about the wheel axis;

wherein the pockets are spaced radially outward from the shaft (Fig. 1);

wherein each pocket 18 tapers radially inwardly toward a leading side thereof (Fig. 1);

wherein the pockets are collapsible (Fig. 1);

wherein each pocket comprises a stiff outer panel (Fig. 1) coupled to the periphery of the wheel by flexible side members (bellows) permitting the stiff outer panel to be displaced between an expanded position of the pocket in which the panel is spaced from the periphery of the wheel and a collapsed position of the pocket in which the panel is directly adjacent the periphery of the wheel;

Art Unit: 3745

wherein means for introducing gas into the pockets comprises a source of gas under pressure 10 page 1, lines 40-45) which selectively communicates with each of the pockets; and

wherein the wheel includes a plurality of radially extending tubes 12 communicating between the pockets and the source of gas under pressure at the center of the wheel (Fig. 1).

4. Claims 1, 2, 4, and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Kusmer (3,412,482).

Kusmer discloses an engine device (Figs. 1, 2, 4) comprising: a wheel 11 supported for rotation in a working direction about a generally horizontal wheel axis (Fig. 1), defining a rising side and a falling side of the wheel as the wheel rotates; a plurality of pockets 14 at spaced positions about a periphery of the wheel; a tank 18 surrounding the wheel for containing a fluid about the wheel; means to introduce gas into the pockets on the rising side of the wheel (Fig. 1); means to remove gas from the pockets on the falling side of the wheel; and a power take-off shaft 12 coupled to the wheel for rotation with the wheel about the wheel axis;

wherein the pockets are spaced radially outward from the shaft (Fig. 1);

wherein the pockets are collapsible (Fig. 1); and

wherein each pocket comprises a stiff outer panel 16 (Fig. 1) coupled to the periphery of the wheel by flexible side members (bellows) permitting the stiff outer panel to be displaced between an expanded position of the pocket in which the panel is spaced from the periphery of the wheel and a collapsed position of the pocket in which the panel is directly adjacent the periphery of the wheel.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kusmer.

Kusmer discloses all the limitations except the tank does not have an outer wall which is generally cylindrical about the wheel axis, spaced outwardly from the periphery of the wheel as claimed.

Since the applicant has not disclosed that having the tank having an outer wall which is generally cylindrical about the wheel axis, spaced outwardly from the periphery of the wheel solves any stated problem or is for any particular purpose above the fact that the tank holds the fluid to provide a working environment for the engine, and it appears that the tank of Kusmer would perform equally well with the cylindrical shape as defined claimed by applicant, it would have been an obvious matter of design choice to modify the tank of Kusmer by utilizing the cylindrical shape as claimed.

Allowable Subject Matter

7. Claims 8, 10, and 14-19 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Prior Art

The prior art made of record but not relied upon is considered pertinent to applicant's disclosure and consists of 2 patents.

Al-Mutairi (6,115,950) and Johnson (4,054,031) are cited to show different power generating devices using buoyancy of collapsible members.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Examiner Ninh Nguyen whose telephone number is (571) 272-4823. The examiner can be normally reached on Monday-Friday from 7:30 A.M. to 5:00 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look, can be reached at (571) 272-4820. The fax number for this group is (571) 273-8300.

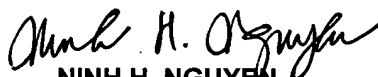
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

Application/Control Number: 10/521,816

Page 7

Art Unit: 3745

system, please go to <http://pair-direct.uspto.gov> or contact the Electronic Business center (EBC) at 866-217-9197 (toll-free).


NINH H. NGUYEN
PRIMARY EXAMINER

Nhn
September 15, 2006